#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Y. Nakamura, et al. EXAMINER: S. Swope (Parent Case)

U.S.S.N.: Divisional of 10/019,733 GROUP: 1652 (Parent Case)

FILED: October 30, 2003

FOR: NOVEL PROTEIN AND DNA THEREOF

MAIL STOP: PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir: or Madame:

#### INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§1.97 and 1.98, applicants hereby submit an Information Disclosure Statement for consideration by the Examiner.

## I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

## II. COPIES

- a. \_\_ Submitted herewith is a legible copy of (i) each U.S and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- b.  $\underline{X}$  Copies of references submitted in parent application, 10/019,733 to which priority is claimed under 35 USC § 120.

# III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

a. \_\_ Except as may be indicated below in (b), all of the patents, publications or other information are in the English language or were cited in an English language Search Report, a copy of which is attached hereto (concise explanation not required).

| b A concise explanation of the relevance of all patents, publications or othe information listed that is not in the English language is as follows:   |
|---|
| cThe following additional information is provided for the Examiner's consideration:   |
| FEES  |
| IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b) (check one box)   |
| a within three months of the filing date of a national application (37 C.F.R. § 1.97(b) (1)). No fee or certification is required.  |
| bwithin three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b) (2)). No fee or certification is required.  |
| c. X before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(t) (3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § I.97(c) and see the certification under 37 C.F.R. § 1.97(e) below, or, if no certification has been made, charge our deposit account a fee in the amount of \$240.00 as required by 37 C.F.R. § I.17(p). |
| V. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c): (check one box)   |
| before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c) (1)) or before the mailing date of a Notice of Allowance under 37 C.F.I. § 1.311 (See 37 C.F.R. § 1.97(c) (2)).   |
| aNo certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).   |
| bSee the certification below. No fee is required.   |
| VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e) (check only one box)  |

The undersigned hereby certifies that

| a each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or  |
|--|
| b no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § I.56(c) more than three months prior to the filing of this statement.  |
| c Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned certifies that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement. |
| VII. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(d)   |
| <u>after</u> the mailing date of a Final Rejection or Notice of Allowance but<br><u>before</u> the payment of the Issue Fee, <u>and</u> the requisite Certification,<br>petition, and petition fee are included herein.  |
| aafter the mailing date of a Final Office Action under 37 C.F.R. §1.113  |
| bsee certificate above   |
| ca fee in the amount of \$180.00 is required by 37 CFR §1.17(p)  |
| dapplicant hereby petitions that this Information Disclosure Statement is considered in accordance with 37 C.F.R. §1.97(d).  |
| Enclosed is a check in the amount of \$180.00 for the above-indicated fee.  Should any further fee be associated with the submission of this Information Disclosure  Statement, the Commissioner is authorized to charge our Deposit Account No. 04-  1105.  |
| X_No fee is required.  |
|  |

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition, if necessary) and charge the appropriate fee to Deposit Account No. <u>04-1105</u>.

Respectfully submitted,

Date: October 30, 2003

Bv:

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| FORM PTO-1449          |    |   |             | DOCKET NO: SERIAL NO.:             |           |                 |                            |  |
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| INFORMATION DISCLOSURE |    |   |             | 56801 DIV (46342) Not Yet Assigned |           | et Assigned     |                            |  |
| STATEME                | NT |   | 7           | APPLICANT(S): ARAKAW               | A, et al. |                 |                            |  |
|                        |    |   | Ī           | FILING DATE: GROUP NO.:            |           |                 |                            |  |
|                        |    |   |             | Filed Herewith                     | Not Yet A | ot Yet Assigned |                            |  |
| -                      |    |   | UNITED      | STATES PATENT DOCUM                | MENTS     |                 |                            |  |
| EXAM.<br>INITIALS      |    | DOCUMENT<br>NUMBER  | DATE        | NAME                               | CLASS     | SUBCLASS        | FILING DATE IF APPROPRIATE |  |
|                        | AA | 5,891,621   | 04-1999     | Chabin et al.                      | 435       | 4               |                            |  |
|                        |    |   | FOR         | EIGN PATENT DOCUMEN                | ITS       |                 |                            |  |
|                        |    | DOCUMENT  |             |                                    |           |                 | TRANSLATION                |  |
|                        |    | NUMBER  | DATE        | COUNTRY                            | CLASS     | SUBCLASS        | YES/NO                     |  |
|                        | ВА | WO 99/06552   | 11/02/1999  | PCT                                | C12N      | 15/12           | in English                 |  |
|                        | вв | EP 0726 277 A2  | 14/08/1996  | 5 EPO                              | C07K      | 16/40           | in English                 |  |
|                        | вс | JP-A-10-14582   | 20/01/1998  | 3 JAPAN                            | C12N      | 15/09           | YES                        |  |
|                        |    |   |             |                                    |           |                 |                            |  |
|                        | 01 | THER DOCUMEN  | rs (includi | NG AUTHOR, TITLE, DAT              | TE, PERT  | INENT PAGES     | , ETC.)                    |  |
|                        | CA | PAVLOFF, Nadine, et al "Sequence Analysis of the Large and Small Subunits of Human Ribonucleotide Reductase", <u>DNA Sequence – J. DNA Sequencing and Mapping</u> , (1992), Vol. 2, Nol 4 – pp. 227-234. GenBank Accession No. X59618). |             |                                    |           |                 |                            |  |
|                        | СВ | REICHARD, Peter, "From RNA to DNA, Why So Many Reibonucleotide Reductases?", Science (1993) Vol. 260, No. 5115, 1773-1777.  |             |                                    |           |                 |                            |  |
|                        | СС | TANAKA, Hiroshi, et al., "A Ribonucleotide Reductase Gene Involved In a p53-Dependent Cell-Cycle Checkpoint for DNA Damage", <u>Nature</u> , (2000), Vol. 404, No. 6773, p. 42-49.  |             |                                    |           |                 |                            |  |
|                        | CD | Ansorge et al, T46249 hypothetical protein DKFZp761E1312.1. 04-FEB-2000. EMBL Acc# AL137348. Alignment with SEQ ID NO:1.  |             |                                    |           |                 |                            |  |
|                        | CE | Pavloff et al, Ribonucleoside-diphosphate reductuase M2 chain. 01-JUL-1993. SwissProt Acc# P31350. Alignment with SEQ ID NO: 1.   |             |                                    |           |                 |                            |  |
|                        | CF | Duclert et al, Human secreted protein encoded by 5' EST SEQ ID NO: 88. ID# AAY13074 from WO9906552-A2. 22=JUN-1999. Alignment with SEQ ID NO:1.   |             |                                    |           |                 |                            |  |
|                        | CG | Yumi et al, Ribonucleotide Reductase Abstract from JP10014582A. 20-JAN-1998 and attached IDS for PCT/JP00/04189.  |             |                                    |           |                 |                            |  |
| EXAMINE                | ₹: |   |             |                                    | DATE:     |                 |                            |  |